



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,766	10/19/2004	Peter Clive Bridges	04-870	6029
20306	7590	11/29/2006	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			ALI, SHUMAYA B	
300 S. WACKER DRIVE			ART UNIT	
32ND FLOOR			PAPER NUMBER	
CHICAGO, IL 60606			3771	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,766

Applicant(s)

BRIDGES ET AL.

Examiner

Shumaya B. Ali

Art Unit

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/28/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/19/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/28/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claims 1-7 are pending in the current application.

Response to Arguments

Applicant's arguments filed 8/28/06 with respect to claim 1 have been fully considered but they are not persuasive. Tischer et al. supporting frame 148 anticipates claimed seal structure. In column 7 lines 48-52, Tischer et al. disclose frame 148 prevent formation of gap between the annular edge of hood 113 and the facemask 112 during use. Therefore, the frame supports the structural limitation of claimed seal structure. Claims 1,2,4-7 considered rejected under 35 U.S.C. 102(b) as being anticipated by Tischer et al US Patent No. 6,328,031

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tischer et al US Patent No. 6,328,031

Regarding claim 1, Tischer et al. disclose hood and face mask assembly (110) in figures 12 and 13. Tischer et al. further disclose a first sub-assembly (113) adapted to be worn on the head and including a seal (148) adapted to seal around the periphery of the user's face when worn (col.7 lines 49-51, support frame 148 prevent formation of gaps between annular edge 147 of the hood 113 and the face mask 112 during use, thus support frame 148 is forming a seal around the periphery of the user's face), and a second sub-assembly (112) separable from the first subassembly but selectively co-operable therewith (see col.2 line 36-38, "hood is detachably connected face mask so as to secure the annular edge of the hood in the annular recess of the face mask", see also col.9 lines 18-22, "face mask can be attached to the firefighting hood before donning them. The firefighter can then re-don his firefighting helmet without disrupting the operative relationship of the firefighting hood to the face mask"), the second subassembly comprising a face piece (112) adapted to co-operate with the first sub assembly to define therewith a facial cavity (116) bounded by said seal, an inlet (118) connectable to a source of breathing gas for supply (col.6 lines 23-25 "a channel 118 for providing fluid communication between the breathing chamber of the face Mask and a breathing apparatus") to the user, and an outlet (oval aperture depicted on mask in figure 13, see labeled fig.13 attachment below) for the exhaustion of exhaled gas from the user.

Regarding claim 2, Tischer et al. disclose wherein the first and second sub-assemblies are completely separable whereby the first sub-assembly can be worn alone,

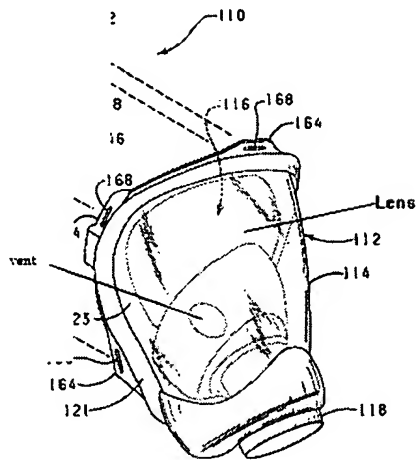
the second sub-assembly being demountable attachable to the first-subassembly (see col.2 line 36-38, "hood is detachably connected face mask so as to secure the annular edge of the hood in the annular recess of the face mask", see also col.9 lines 18-22, "face mask can be attached to the firefighting hood before donning them. The firefighter can then re-don his firefighting helmet without disrupting the operative relationship of the firefighting hood to the face mask").

Regarding claim 4, Tischer et al. disclose wherein the second sub-assembly is articulated to the first sub assembly (as seen in figure 13)

Regarding claim 5, Tischer et al. disclose wherein the first sub-assembly comprises headgear in the form of a flexible hood of air-permeable material ("Nomex", see col.6 lines 65-67, is considered air permeable material).

Regarding claim 6, Tischer et al. disclose wherein the second sub assembly includes an oronasal mask (as seen in figures 12 and 13) to be disposed within said facial cavity.

Regarding claim 7, Tischer et al. disclose wherein said face piece including a demountable lens portion (see labeled fig.13)



Prior Art

U.S. Patent
US 6,328,031 B1

FIG. 13

Claims 1-5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Andrews et al. US Patent 2,935,985.

Regarding claim 1, Andrews et al. disclose a respirator assembly comprising: a first sub-assembly (figures, 1,2, reference objects 1,2,4,5,15) adapted to be worn on the head and including a seal (fig.4, 5c) adapted to seal around the periphery of the user's face when worn; and a second sub-assembly (fig.4, 3) separable from the first sub-assembly but selectively co-operable therewith (detachable by unlocking a clamp, see col.5 lines 10-50), the second sub-assembly comprising a face piece (fig.4,3) adapted to co-operate with the first sub-assembly to define therewith a facial cavity (space created between face of the user and face piece, as depicted in figure 4) bounded by said seal, an inlet (col.5 lines 53-57, "inhalation valve" providing inlet) connectable to a

source of breathing gas for supply to the user and an outlet (fig.5, 33a) for the exhaustion of exhaled gas from the user (col.5 lines 57-62).

Regarding claim 2, Andrews et al. disclose wherein the first and second sub-assemblies are completely separable whereby the first sub-assembly can be worn alone, the second sub-assembly being demountably attachable to the first sub-assembly (sub assemblies can be separated by unlocking, see col.4 lines 34-42, col.5 lines 10-48).

As to claim 3, Andrews et al. disclose wherein the first sub-assembly comprises headgear including a substantially rigid ring structure (15) adapted to be juxtaposed to the user's face when the headgear is donned and from which said seal extends to engage around the periphery of the user's face (5c), the second sub-assembly being configured to be mounted to said ring structure and secured thereto by at least one releasable fastener (fig. 4, 22-25,28,29, see also col.5, lines 10-48).

As to claim 4, Andrews et al. disclose wherein the second sub-assembly is articulated to the first sub-assembly (col.5 lines 10-48).

As to claim 5, Andrews et al. disclose wherein the first sub-assembly comprises headgear in the form of a flexible hood of air-permeable material (col.3 lines 20-25).

As to claim 7, Andrews et al. disclose wherein said face piece includes a demountable lens portion (col. 4 lines 10-48, fig.3 further depicts face piece as being demountable lens).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews et al. US Patent 2,935,985 in view of Bonhomme et al. US Patent 6,520,177 B1.

As to claim 6, Andrews et al. disclose the claimed invention as applied for claim 1 with the exception of wherein the second sub-assembly includes an oronasal mask to be disposed within said facial cavity. However, Bonhomme et al. in a device for providing protection against hypoxia, usable in a hostile environment teach an oro nasal mask fitted within a face cover with an admission coupling for breathing gas, generally filtered air provided by a blower, and a breathe out valve leading to the atmosphere through the face cover (see col.1 lines 30-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the face piece of Andrews in with an oro-nasal mask for the purposes of providing coupling for breathing gas, which would further ensure delivery of breathable gas to the user as taught by Bonhomme.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **inlet** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Claim 1 is objected to because of the following informalities: **in line 6, recitation "inlet" does not positively recite "inlet means" and "inlet valve" of Applicant's disclosure.** Appropriate correction is required.

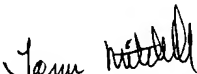
Conclusion

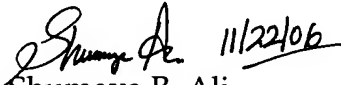
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 2,861,568 is cited to teach peripheral seal used with a headgear.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-W-F 8:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TEENA MITCHELL
PRIMARY EXAMINER

 11/22/06
Shumaya B. Ali
Examiner
Art Unit 3771